

Mechanized Processing and Value Addition for Fish Products

From Catch to Cuisine: Enhancing Fish Quality and Sustainability

This technology is a fish processing and preservation method involving the use of equipment such as solar tent dryers and smoking kilns. Solar dryers offer a low-cost alternative to refrigeration, and smoking kilns utilize smoke to kill microorganisms while drying the fish.



Smoking kiln suitable for processed fish products



WorldFish
Bernadette Fregene

Technology from

ProPAS

Commodities

Fish

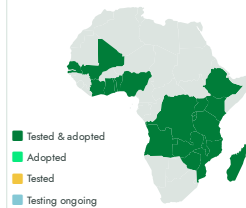
Sustainable Development Goals



Categories

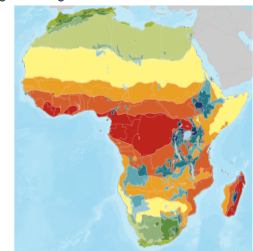
Transformation, Practices,
Agri-food processing

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Processors



This technology is **TAAT1 validated**.



Scaling readiness: idea maturity: 8/9; level of use: 7/9

1500 USD

Handheld electric fish scaler

1,000 USD

Filleting equipment

2,500 USD

Equipment for skinning and deboning 10 to 20 fish/minute

2,000 USD

A greenhouse-style solar dryer 15 m x 8 m with capacity of 850 kg fish per batch



Patent granted

Problem

- Post-Harvest Losses, significant post-harvest losses occur due to bacterial activity and oxidation.
- High ambient temperatures in many regions accelerate the spoilage of fish,
- The availability of mechanized equipment and maintenance might pose challenges, particularly in resource-constrained areas.
- Traditional smoking kilns may consume significant energy and time.

Solution

- Fish processing and preservation technologies extend the shelf life of highly perishable fish, reducing post-harvest losses.
- These methods improve the palatability, taste, and nutritional value of fish products, enhancing their market acceptance.
- Solar tent dryers and smoking kilns are cost-effective and widely used, eliminating the need for refrigeration during transport and storage.

Key points to design your business plan

This technology benefits manufacturers, resellers, and end-users (farmers) in the fish processing industry.

- Key steps include sourcing raw materials, identifying efficient transportation methods, and exploring suitable storage facilities.
- Potential customers include wholesale distributors, development projects, and government agencies.
- Sourcing equipment from countries where technology is available, identifying efficient transportation methods, and exploring suitable storage facilities.
- Cost structure varies depending on equipment type and size, with initial investment offset by long-term savings in fuel costs.

Gender assessment



Climate impact



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<https://taat.africa/mok>

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Enquiries e_catalogs@taat.africa